Volunteer Firemen

FEBRUARY 1941

NATIONAL FIRE PROTECTION ASSOCIATION
INTERNATIONAL
60 Batterymarch Street Boston, Massachusetts

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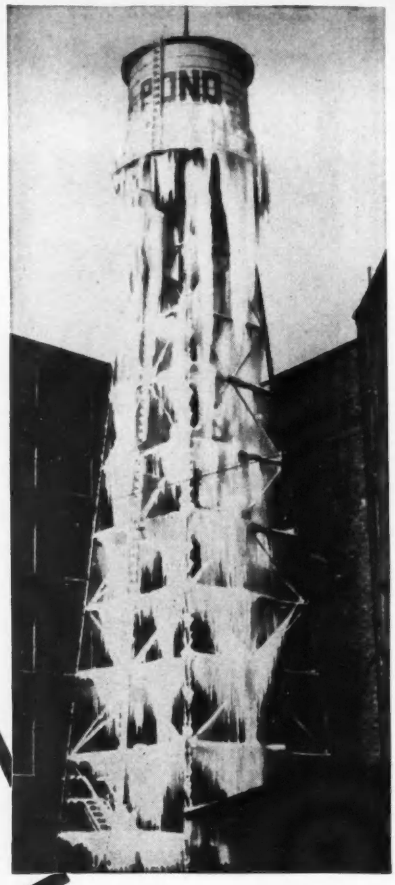
WATER FREEZES

AT 32° FAHRENHEIT



...and water in a sprinkler system is no exception to this fundamental law—which accounts for our annual winter epidemics of needless fire and water losses in sprinklered properties due to freezing...losses which a few simple precautions could so easily prevent.

Frozen sprinkler tanks, leaks from bursting pipes, disastrous fires because sprinklers are shut off to prevent freezing—these are the chief dangers to contend with. And the best safeguard against losses from these causes is A.D.T. Sprinkler Supervisory and Waterflow Alarm Service, which automatically detects trouble conditions in time to correct them *before* serious damage results. This service also makes the sprinkler an automatic fire alarm, summoning the fire department the instant a sprinkler head opens or serious leak occurs.

When you "roll" to an alarm from an A.D.T. supervised sprinkler system, you have assurance that you will find the system in effective operating condition, and that the alarm was transmitted promptly and accurately, without the delays that so frequently occur when detection and reporting of fires is entrusted to the human element.

A.D.T. SPRINKLER SUPERVISORY AND WATERFLOW ALARM SERVICE

Controlled Companies of **AMERICAN DISTRICT TELEGRAPH CO.** *155 Sixth Avenue, New York, N. Y.*

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Electric Protection Services

AGAINST FIRE · BURGLARY · HOLDUP

A NATION-WIDE ORGANIZATION

Volunteer Firemen

Volume 8 Number 2

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CONTENTS

For February, 1941

	Page
Fairfield, Iowa, Establishes Fire Prevention Bureau	4
Anderson Township, Ohio, Organizing Department	4
The Large Loss Fires of 1940	5
Handling Explosive and Incendiary Bombs. By W. J. Scott, K. C.	6
The Memphis Instructors' Conference	7
Michigan's 4-Phase Training Program	7
A State-Wide Defense Plan for Maryland	8
Fire Prevention Plays	10
Are Those Christmas Trees Out Yet?	12
Surveys All Buildings in Middletown, Ohio	12
Christmas Verses Prove Popular	12
The Campaign for State Fireworks Laws	12
Nebraska Regional Fire Schools	13
Pyrene Prize Letter Contest	14

Benjamin Franklin, volunteer fireman, from a portrait in the museum of fire relics of the Insurance Company of North America in Philadelphia. The picture was made for the Union Fire Company of Philadelphia, first volunteer organization in America, which Franklin founded in 1736.

THE front cover picture is not a war scene but just a routine job handled by the Cincinnati Fire Department in December. Fourteen persons were killed when an explosion, reported as due to illuminating gas, blew to bits two buildings. The buildings were three and four stories respectively, of ordinary brick walls and wooden interior construction, occupied on the first floors as stores and with dwellings above.

THE N.F.P.A. annual meeting will be held May 12 to 16 inclusive, in Toronto, Ontario, according to a vote of the board of directors at its mid-winter meeting last month. At the annual meeting in Atlantic City last year the first meeting of the Volunteer Firemen's Section was held. The volunteers who participated in this meeting appeared to find it so helpful that it will be repeated at Toronto this year. Toronto is an ideal location as nearby are some of the finest volunteer departments in the Dominion.

The program committee is now working on details of the meeting with Canadian members and there will be further announcements. Watch for them.

Now is a good time, however, to take up the matter with the members of your company and authorize a representative or a delegation to attend. For fire departments and fire companies in the United States, particularly, the opportunity of visiting Canada and comparing notes with Canadian departments would be a fine opportunity to get a line on the role of fire departments under war conditions.

A very practical consideration too is the fact that the U. S. dollar is worth a dollar and ten cents in Canada due to the current situation in exchange.

THERE'S going to be a lot about duties and responsibilities of fire departments in national defense to report in the coming months. For example, the two leading articles in this issue about Maryland's defense plan and handling bombs cover pretty important subjects. Is your company receiving VOLUNTEER FIREMEN regularly? If not, why not bring the matter up at the next meeting and see that the company is enrolled.

LAST month 12 departments with 131 men joined the Volunteer Firemen's Section for the first time. In addition 71 departments with 1,636 men renewed membership. This makes the total enrollment 699 departments and 14,624 men. The following departments are newly enrolled:

Luverne Fire Department, Luverne, Alabama.

The Republic Mining & Manufacturing Company, Bauxite, Arkansas.

Northbrook Volunteer Fire Department, Northbrook, Illinois.

Oregon Fire Department, Oregon, Illinois.

Chrisney Volunteer Fire Department, Chrisney, Indiana.

Crisfield Fire Department, Crisfield, Maryland.

Manhasset-Lakeville Fire Department, Manhasset, New York.

Cherry City Volunteer Fire Company, Shaler Township, Pennsylvania.

Pomeroy Volunteer Fire Company No. 1, Pomeroy, Pennsylvania.

Salem Volunteer Fire Department, Salem, West Virginia.

Falls View Hose Brigade, Niagara Falls, Ontario.

Biggar Fire Department, Biggar, Saskatchewan.

FIRE losses in 1940 were $306,469,520 or slightly less than the 1939 figure of $313,498,840, according to the National Board of Fire Underwriters. These figures are based on notices of incurred loss received by insurance companies, members of the board, plus an allowance for unreported and ininsured losses. The following table shows the losses for the months of 1939 and 1940:

	1939	1940
January	$27,615,316	$36,260,650
February	29,303,520	34,410,250
March	30,682,168	29,788,800
April	27,061,522	26,657,190
May	27,031,700	23,446,590
June	24,190,700	19,506,000
July	22,468,304	20,322,800
August	22,800,500	20,722,100
September	22,837,250	21,198,000
October	24,300,500	22,091,140
November	27,248,160	23,449,000
December	29,959,200	28,617,000
Total 12 months	$313,498,840	$306,469,520

A well designed pumper for rural runs just put into service in Stillwater, Oklahoma. It carries 750 gallons of water in 4 compartments arranged so that part of the load may be dumped when soft roads are encountered. Seats a crew of 7, has a 350 GPM pump, 400 feet of 1½ inch hose, 400 feet booster line. A good example of co-operative action for rural protection, too. The U. S. Resettlement Administration furnished the 2-ton Dodge chassis, student firemen at Oklahoma A. & M. worked on the piece and other expenses were shared by A. & M. College, Payne County Commissioners and the City of Stillwater.

Fairfield, Iowa, Establishes Fire Prevention Bureau

THE City of Fairfield, Iowa, has recently adopted a comprehensive fire prevention ordinance establishing a Fire Prevention Bureau in the fire department and outlining the procedure for control of fire hazards in the city. This is a most progressive step for a city of its size and was taken under the guidance of Fire Chief G. T. Rowley and other members of the Fairfield Fire Department. For the information of readers who are interested in knowing what subjects might be covered by such an ordinance in a small municipality, the following digest indicates the contents of each section of the ordinance:

Sec. 1. Bureau of Fire Prevention established with Fire Chief as Chief of Bureau and City Fire Marshal as chief inspector. All members of fire department may be detailed as inspectors.

Sec. 2. The Bureau shall enforce all laws covering: (1) the prevention of fires, (2) storage and use of explosives and flammables, (3) installation and maintenance of automatic and other alarm systems and fire extinguishing equipment, (4) the maintenance and regulation of fire escapes, (5) means of exit from all buildings in which numbers of people live, work or congregate, (6) the investigation of the cause, origin and circumstances of fires.

Sec. 3. Regulates bonfires and provides for proper incinerators.

Sec. 4. Regulates disposal of hot ashes and coals; requires proper metal containers.

Sec. 5. Requires owners and occupants to keep lots free of weeds or other combustibles.

Sec. 6. Regulates handling and disposal of rubbish and shavings.

Sec. 7. Regulates storage of empty packing cases, boxes, and barrels.

Sec. 8. Prohibits the use of combustible decorations unless permit is obtained from Fire Prevention Bureau and decorations are flameproofed.

Sec. 9. Requires recharging of fire extinguishers by licensed persons.

Sec. 10. Heating or lighting apparatus having open flame prohibited in hazardous locations.

Sec. 11. Authorizes members of Fire Prevention Bureau to enter property to make inspections during reasonable hours.

Sec. 12. Requires the Fire Prevention Bureau to make semi-annual inspection of all hazardous processes, interior fire alarm systems, and automatic sprinkler systems.

Sec. 13. The Fire Prevention Bureau must make semi-annual inspections of all properties except dwellings to enforce provisions of the ordinance. Outlying sections will be inspected once a year.

Sec. 14. May order removal or repair of dilapidated buildings or other dangerous properties.

Sec. 15. Outlines procedure for enforcing Sec. 14.

Sec. 16. Provides for the investigation of every fire, investigation of fires of suspicious origin, and keeping of proper records of all fires.

Sec. 17. The City Solicitor is required to assist in investigation of suspicious fires when requested to do so.

Sec. 18. School fire drills must be conducted monthly. All exits must be unlocked during school hours.

Sec. 19. Requires the fire department to maintain adequate records of fires and losses.

Sec. 20. Provides for an annual report of the Bureau of Fire Prevention covering the proceedings under the ordinance. The chief is to suggest changes in the ordinance as needed.

Sec. 21. Provides for the enforcement of the ordinance by penalties upon violators.

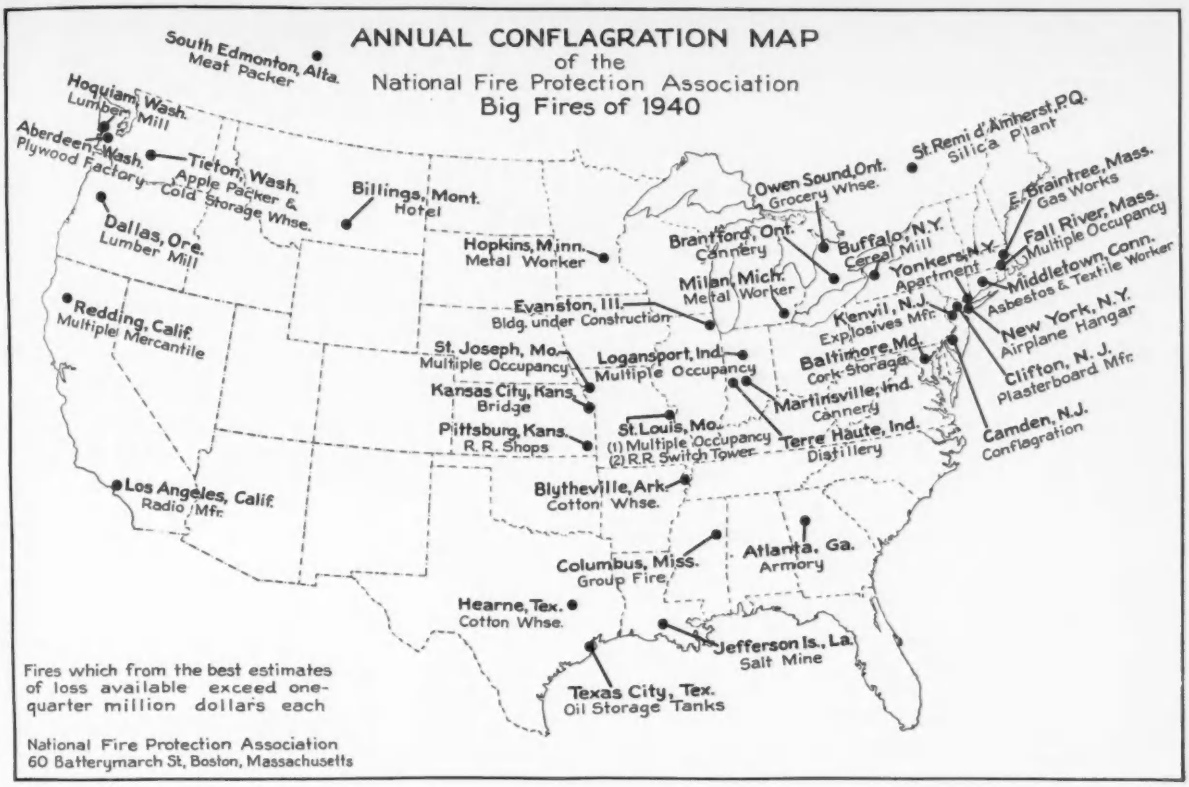
Sec. 22. Repeals all inconsistent ordinances.

Sec. 23. Provides for ordinance to take effect ten days after passage.

Anderson Township, Ohio Organizing Department

THE readers of VOLUNTEER FIREMEN for December may recall an item telling of a suit filed by the City of Cincinnati against one of its suburbs, Anderson Township, for failure to pay $405 allegedly due the city for fighting fires in the township during 1939. At that time, VOLUNTEER FIREMEN took the opportunity to point out that a community the size of Anderson could afford to have a pretty good volunteer fire department with what they had to pay to purchase fire protection from the city. A bulletin dated December 21, 1940, issued by the Underwriters Salvage Corps of Cincinnati contains the information that a permanent volunteer fire department is now being formed in Anderson Township. A meeting was held Christmas week for the election of officers, formulation of by-laws and to make plans for obtaining fire fighting equipment.

Fire Chief David G. Stuart of Ventnor City, N. J., incorporated power driven reels for hose in this new pumper for his city. He reports they speed up hose laying and pickup after a fire. A 400 gallon tank is surmounted by 4 reels for 1½ and 1 inch hose, each holding 250 feet. Normally 3 reels have 1½ inch hose and 1 has 1 inch hose. A rear reel, also power driven, carries 500 feet of 2½ inch hose. Pump is 500 GPM 2-stage American-Marsh, chassis Indiana, built by The White Co.



The Large Fires of 1940

IN none of the large fires of 1940 did the war or factors resulting from the war appear to play any important part. The N.F.P.A. Department of Fire Record has just completed its tabulation of the largest fires of the year in the United States and Canada and the locations are shown on the annual conflagration map above. There was a total of 38 fires each of which caused losses of one quarter million dollars or more. Of these, 4 occurred in Canada. This represents an increase of 11 fires in this class over the number reported for 1939 and is 3 greater than the average for the past five years.

Twelve of the fires caused individual losses of over $500,000. The largest loss of the year was the conflagration of July 30 in Camden, N. J., which involved the plant of the R. M. Hollingshead Corporation and numerous dwellings with a loss estimated from $1,000,000 to $2,000,000.

While it is true that most of these large loss fires occurred in cities having paid fire departments, a number of them occurred in smaller communities and were fought by volunteer fire departments. One of these was a large apple packing plant and cold storage warehouse at Tieton, Wash., of the Yakima County Horticultural Union on June 27. The loss was something over $300,000. The fire started in a pile of wood packing boxes and flying brands carried the sparks to combustible roofs. Adequate water was lacking for the fire department operations. Lack of water also figured in another volunteer-fought fire in a large wood construction canning factory at Martinsville, Ind., on October 6 with a loss of $360,000.

Structural deficiencies were the greatest single contributing cause of the large losses in the 38 big fires last year. Such defects included generally inferior construction, excessively large areas without proper division or fire walls, unprotected stairs or shaft openings, inaccessible open roof spaces or underfloor spaces, and lack of exposure protection. Hazardous contents of buildings or excessive amounts of burnable stocks also contributed to many of the large losses.

Other leading factors causing large losses were delays in the discovery of the fire or delays in giving the alarm which were usually due to attempts to fight the fire without first calling the fire department. Inadequate private fire protection, inadequate water supplies, or failure of water supplies, unfavorable weather conditions and explosions, each contributed to a number of losses.

The large losses in all of these fires may be said to be due to the neglect of proven fire protection rules. Where values in excess of a quarter of a million dollars are involved, fire protection is deserving of more consideration than it appears to have been given in most of these cases. Large areas should be subdivided in a standard manner and adequate fire protection should be provided. In many of the fires, both public and private fire protection facilities were too weak to be effective.

In practically every case, these large loss fires might have been prevented or extinguished in their incipiency if recognized standard measures of fire prevention and fire protection had been completely observed. Automatic sprinklers, for example, might have controlled the great majority of these fires with small loss and lack of standard automatic sprinkler protection might have been cited as the factor responsible in nearly every case. Lack of other forms of protection figured also.

A PRACTICAL way to keep your town off the map this year, next year, and the years to come, is to seek out the danger spots in your community. The way to start is to make a list of all buildings and locations where a large fire can occur. You will put down manufacturing plants. lumber yards, oil storage plants, large stores and warehouses and other places where combustible material is concentrated. Also on the list should be schools, public buildings, institutions, hospitals and such structures which may be so constructed that they may be completely destroyed in a fire.

HANDLING EXPLOSIVE AND INCENDIARY BOMBS

By W. J. Scott, K. C.
Fire Marshal, Ontario

ON discovery of a bomb or suspected bomb, under ordinary conditions the first duty of police and fire authorities is the preservation of human life and then the preservation of property. Under war or emergency conditions, when the property endangered is vital to the war or defense effort, these duties frequently may possibly be reversed. There are no specific rules which will guarantee safety when handling bombs, but because of emergency conditions, it is most advisable for fire officers to have some knowledge of the means to lessen the hazards.

Saboteurs are most likely to use home-made bombs of rather crude construction, and these are more dangerous to handle than a more scientifically constructed bomb for the reason that their action is likely to be more uncertain. On the other hand, sabotage bombs may be of the utmost scientific precision, utilizing latest chemical formulae and designed either by a trained enemy agent or one of subversive character. But there is one cardinal rule to be observed at all times in the handling of unexploded bombs, namely that only one man at a time should be near to or handle the bomb, to ensure that if it does explode the loss of life will be kept at a minimum.

IN HANDLING explosive or incendiary bombs, the first thing to be done on discovering an unexploded bomb or suspected bomb is to decide whether or not to move it. The deciding factor in this is the amount of damage the bomb is likely to do if it detonates in the location where it is found. The type of bomb, whether explosive or incendiary, and its size, weight and accessibility, are also factors to be considered. In time of war or emergency, the damage such a bomb might do to defenses or to military equipment, to a war industry, or to some essential service, may be such as to justify the risk to life in attempting to remove the bomb. No set rule can be laid down as to whether a bomb should be allowed to remain until the arrival of an explosives expert or whether it should be removed without delay. There are, however, some safety suggestions to follow.

If the bomb is to be left in its original location, measures should be taken instantly to deflect its energies and so lessen the damage when it detonates. Some of these measures are:

(1) Clear the building or danger area of all occupants to avoid injury from flying fragments and debris.

(2) Use extreme caution to ensure that the bomb is not moved or disturbed, nor any nearby object moved that might be connected to any trigger mechanism of the bomb.

(3) Establish an organized guard outside of the danger area to keep persons away, and allow only one person at a time to go near the bomb.

(4) If the bomb is in any building, open wide all doors and windows to allow any blast to disperse more easily.

(5) Surround the bomb or suspected bomb with sandbags or felt mattresses to localize and direct the severity of the anticipated blast in the direction where it will do the least harm. Be careful to utilize mattresses without metal springs, for these might become missiles. For sandbags use small bags that can be handled easily. It is important that the barricade be not so close to the bomb as to add to the force of the explosion. The protection should be built at an angle to deflect the blast rather than to try to stop it, and also should be flexible rather than too rigid.

(6) Remove any flammable materials from the surrounding area, and shut off all gas, electric, steam or compressed air lines.

(7) Remove from the area all valuable machinery or equipment which can be moved, or build special protection of sandbags or mattresses for important fixed equipment, walls or pillars.

(8) Have available fire fighting apparatus to quell any fire that might be started by the detonation of the bomb, and arrange also for medical aid in the event that anyone sustains injuries.

(9) Send for a bomb or explosives expert to handle the bomb by contacting Army or Navy ordnance officers, mining experts, or some other organization of recognized authority.

IF THE bomb has to be moved, most of the preliminary precautions listed above should be taken, not only in the immediate location of the bomb, but also along the route over which the bomb will be transported. Following are further suggestions:

(1) Avoid turning the bomb on its side or upside down, and also avoid shocking or jarring it.

(2) A shield consisting of a heavy felt mattress will afford a certain amount of protection if kept between the operator and the bomb.

(3) Occasionally a bomb can be moved to a less hazardous location by dragging it with a rope at least 50 feet long. Care must be taken not to upset or tilt the bomb or to subject it to any rough treatment.

(4) If the bomb has to be picked up and carried, gloves worn by the operator might give some protection against burns if the bomb is incendiary, and would also aid in preserving any finger-prints on the bomb.

(5) If the bomb has to be transported any considerable distance, avoid densely populated areas or heavy street traffic, and take every precaution to avoid any shock or a collision to the vehicle used. The use of a trailer will separate the bomb from the driver by a greater distance.

(6) Special vehicles have been designed for the transport of bombs. One type has layers of mattresses to protect the driver and to deflect the blast upwards where it will do least harm. Another type has a large tank with sloping sides and an open top, and containing oil in which the bomb can be immersed.

(7) As few persons as possible should be near the bomb, and if possible each operation should be carried out by a single individual.

AMONG misconceptions as to the proper procedure in handling bombs is the entirely incorrect theory that immersing a bomb in water renders it harmless. Conversely, immersing a bomb in water will frequently detonate it. In the case of a bomb containing an electrical mechanism, water might cause a short circuit and result in detonation, or the bomb may contain a metal that bursts into flame upon coming into contact with water, or an acid that is affected by or that floats on water. Even a fuse and dynamite bomb will not be affected by water if a water-proof fuse and blasting gelatine are used. On the other hand, if dynamite is left some hours in water, there is a tendency for the nitroglycerine to become separated from the other materials, thereby presenting all the dangers of liquid nitroglycerine. If it is essential to use some quenching agent, light lubricating oil or coal oil is the best to employ to lessen the danger of detonation. The oil tends also to stop any clockwork mechanism.

From a lecture before the Firemen's Training School conducted by the University Extension Department of the University of Toronto under the auspices of the Dominion Association of Fire Chiefs and the Ontario Fire Marshal's Office.

The Memphis Instructors' Conference

THE biggest recent event in the field of firemen's training was the Fire Department Instructors' Conference held in Memphis last month. Key men in the field met in what was the 13th annual session of the conference.

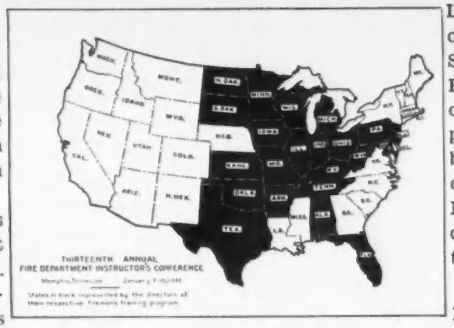
The meeting emphasizes that it is just what its name implies. It is not a convention, nor is it a training school. It takes no official action on any matter and advocates no doctrine. Its sponsors are the Fire Prevention Department of the Western Actuarial Bureau of Chicago, Richard E. Vernor, Manager, and the Memphis Fire Department, Irby C. Klinck, Chief. Mr. Vernor is N.F.P.A. Vice-President.

The above map shows the principal territorial representation at the meeting. In all, persons from 27 states were present, but in each of the 23 states shown, the director or local officials taking leading parts in the respective state training programs were in attendance. In addition, city drillmasters and training directors were present from numerous cities. A list of the larger cities represented follows:

Chicago, Ill.	Peoria, Ill.
Detroit, Mich.	Schenectady, N. Y.
Cleveland, O.	Little Rock, Ark.
Washington, D. C.	Saginaw, Mich.
Minneapolis, Minn.	St. Joseph, Mo.
Houston, Texas	Lansing, Mich.
Columbus, Ohio	Irvington, N. J.
Dallas, Texas	East Orange, N. J.
Memphis, Tenn.	Johnstown, Pa.
St. Paul, Minn.	Hammond, Ind.
Birmingham, Ala.	Terre Haute, Ind.
San Antonio, Texas	Charleston, W. Va.
Dayton, Ohio	Fargo, N. D.
Oklahoma City, Okla.	Tyler, Texas
Jacksonville, Fla.	Parkersburg, W. Va.
Nashville, Tenn.	Beloit, Wis.
Tulsa, Okla.	Mason City, Iowa
Wichita, Kansas	Owensboro, Ky.
Knoxville, Tenn.	Jackson, Tenn.

HEAD-LINE talks were given in three noon-day luncheon sessions which were presided over by the Hon. Walter Chandler, Mayor of Memphis, Eliot Ness, Safety Director, Cleveland, Ohio, and Dean Harold G. Ingham of the University of Kansas, who is Director of the Kansas Fire College. Respective speakers were Eugene Arms, Manager, Mill Mutual Fire Prevention Bureau, Chicago, who spoke on Safeguarding the Storage of Agricultural Products from Destruction by Fire; E. P. Coffey, Chief of the Technical Laboratory of the Federal Bureau of Investigation, who spoke on Fire Prevention from the Possible Sabotage Standpoint; and Albert Evans, Director of Disaster Relief, Midwestern Branch, American Red Cross, St. Louis, who spoke on Disaster Plan and National Emergency Coordination.

The practical problems of state training programs were thoroughly canvassed by discussions which took up successively state fire colleges, regional fire schools, field instruction, teacher-training and departmental instruction. Under each of these headings the school programs were discussed with reference to sponsor, programing, financing, promotion, securing participation, location and facilities, instructors, inter-change of programs, examinations, certificates, and other problems.



Problems of the fire department in national defense occupied an important place on the program. A morning session was devoted to this topic under the leadership of Chief Engineer Hortio Bond of the National Fire Protection Association, Chief James W. Just, Director of Firemen's Training of the University of Maryland, and Emmett T. Cox, Assistant Director, Indiana Fire Schools. This was supplemented by a demonstration, "Fire from the Skies," in charge of Chief Instructor Harry Rogers of the Fire Prevention Department, Western Actuarial Bureau. Various extinguishers and sizes of hose streams were used on the burning magnesium which gave those present a practical working knowledge of what to expect in dealing with incendiary bombs.

Other topics covered by prominent speakers included Flame Extinguishment, a demonstration by Herbert W. Lange, Assistant Engineer, Underwriters' Laboratories, Inc.; the Behavior of the Human Mind and its Relation to the Fire Service, Byron C. Sarvis, Assistant Professor of Psychology, University of Kansas; the Hazards of Overhead Wiring to Firemen by H. E. Byrne, Supervisor of Training, The Detroit Edison Company; Relaying Water and Master Streams by Elwin C. Knowlton, Engineer of the National Board of Fire Underwriters, Chicago, and Harry H. Wolff, Secretary of the Chicago Drill School; Portable Two-Way Radio by Division Marshal George E. Graves, Drillmaster, Chicago Fire Department; and Fire Pumps and Priming Systems by Hubert Walker, Engineer, American LaFrance-Foamite Corporation, Elmira, N. Y.

There were three novel presentations—Battle Maps, by Chief Lloyd Layman of Parkersburg, W. Va.; Tricks of the Trade by Chief J. Ray Pence, Stillwater, Okla.; and Diagnosing the Patient by Drillmaster Forrest B. Lucas of Dayton, Ohio. A program of motion picture films brought to the conference by various members was handled in evening sessions by Professor H. R. Brayton of the Agricultural and Mechanical College of Texas, Director of the Texas Firemen's Training School.

Michigan's 4-Phase Training Program

THE firemen's training program in Michigan is being currently approached under four general headings. The program is a part of the general plan for public service training in the state and is under the direction of the State Board of Control for Vocational Education.

The first of these is a program of town schools consisting of a series of 12 meetings which will be conducted in any department in the state on request. A staff of fire department instructors has been qualified for these schools. The State Board for Vocational Education has set $100 as the cost to the fire department for the school, but is able through a contract for aid with the department to reimburse it for 75 per cent of the cost from vocational training funds.

These town schools are primarily for the smaller departments in the state. A similar plan of operation applies, however, to any large city fire department doing training. The city is credited for whatever hours of training they may do and reimbursed for 75 per cent of the direct salaries paid to instructors.

A third part of the program is the annual fire college, the date for which has been set in July, either the week of the 7th or the 14th. It will be held at the University of Michigan in Ann Arbor under the direction of C. A. Fisher, Director of the Division of University Extension.

Michigan is probably the first state to add to its training program facilities for giving training at the administrative level. Courses in fire department administration are being organized in eight departments. The city of Escanaba with a class of 11 men has already started its program and the cities of Alpena, Saginaw, Bay City, Royal Oak, Ferndale and Birmingham are starting this month. This is handled on a voluntary basis and as a text the course in Fire Administration of the Institute for Training in Municipal Administration, sponsored by the International City Managers Association, is used.

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Looking Ahead erted
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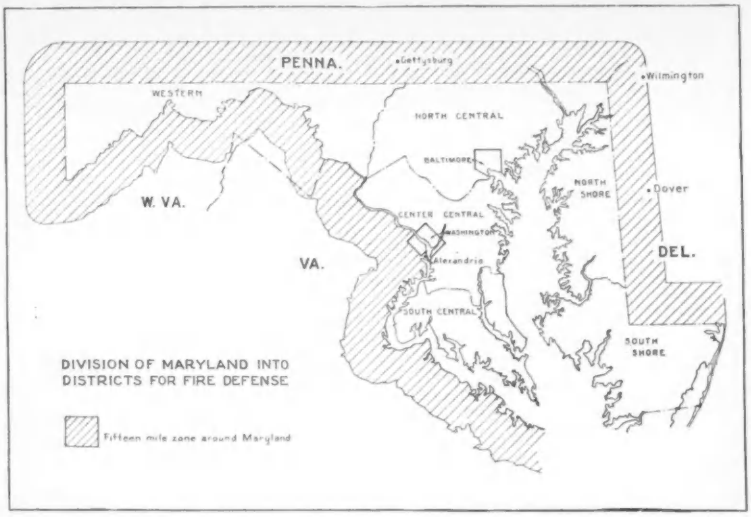
367 Pumpers, 56 , 7,99



The Maryland Defense Plan is to coordinate the fire forces in the state and in a district extending 15 miles into bordering states as shown on the map. The plan is sponsored by the State Firemen's Association, with which the Governor, State Fire Marshal and fire service leaders of the state are working out details. To administer the plan, there will be a Coordinator, assisted by a Technical Adviser and a Secretary. Six regional inspectors will act as liason between the state coordinator and local fire departments and companies. Regional deputies of the State Fire Marshal will supplement this staff in fire investigation and the staff of qualified instructors who work under the direction of Fire Service Extension of the University of Maryland will handle the training work.

MARYLAND is coordinating its fire fighting forces in accordance with a well-organized plan so that the state will survive any fire emergency that may occur as a result of war.

In terms of square miles, Maryland is relatively small. Because of its geographical position, however, and its importance as a producing area, Maryland would surely be among the first of our states to suffer enemy action from the East. For located in Maryland are the Edgewood Arsenal, the Aberdeen Proving Grounds and Fort Meade of the United States Army, the United States Naval Academy and the new Naval Development Station. In the District of Columbia, nerve center of the nation, which juts into Maryland on the northern shore of the Potomac River, are located the Washington Navy Yard, Bolling Field, including both army and navy air bases, and the Naval Research Laboratory. Baltimore, eighth largest city in the country, is a vital and expanding seaboard metropolis and in addition to being a secondary center for government offices, which have been crowded out of Washington, there are located in Baltimore three large airports all of which would be invaluable to our air forces.

Industrially, Maryland is of high ranking importance. Within the state are two plants producing aircraft. Other products include explosives, ships, copper and other non-ferrous metal products, petroleum products, chemicals, electrical machinery and apparatus, and blast furnace and rolling mill products.

In planning for the defense of Maryland against fire, the experience of the British fire service as gleaned from British fire publications and from other more confidential sources was found exceedingly helpful and pertinent. By analyzing the development of the emergency fire service, apparent errors in British methods were eliminated from and apparent successes were incorporated into the framework for the Maryland defense plans.

Over a period of time, apparent errors in British plans were found to include the following:

(1) Arrangements for "mutual assistance" between fire brigades existed largely on paper. When the time at last had arrived for such "mutual assistance" to spring into existence, it was found that the plans which operated so well on paper were much more difficult to put into actual practice.

(2) In planning for "mutual assistance," the human factors, pride and jealousy, were evidently overlooked. In emergency as in peace time, British fire brigades were at first content to rely upon their own resources. They [illegible] from their neighbors when [illegible] urgent

(3) The parochial[illegible]ce-tim was found to be diffi[illegible]place

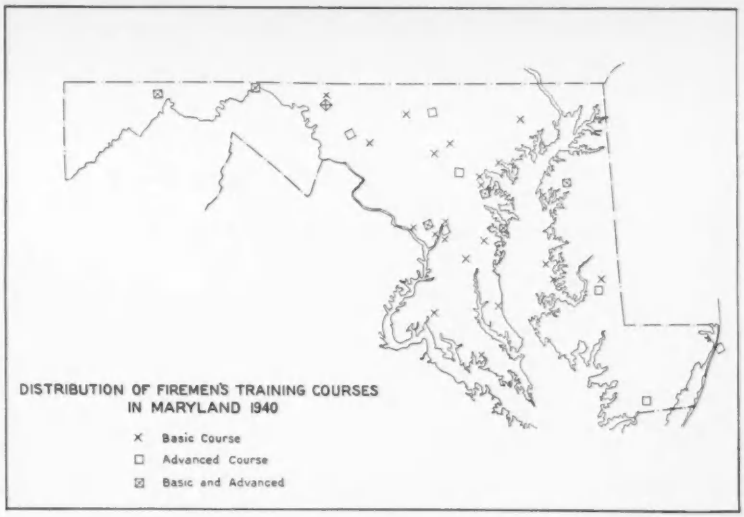
CITY	TELEPHONE NUMBER	AMBULANCE	INHALATOR	EXTRA O CYL'S	FIRST AID MEN	HOSPITAL	DOCTORS	OXYGEN CUT EQUIP	BAR CUTTERS	FLOOD LIGHTS	HEAVY DUTY JACKS	GAS MASKS	FOAM GENR.	LBS. FOAM POWDER	CAP. (GOST'R TANKS)	LADD TRU
ABERDEEN	136						3					2			200 60	
ABERDEEN PROVING GROUND	127	I-ARMY			2	1	2	YES	YES		1 10-T	12	YES	500	5-150 200	2
ABINGDON	CHURCHVILLE 5-F-11						1				YES 5-T	1			240	
ACCOKEEK	2671											2			500	
ANNAPOLIS	2706	YES	2	8	25	YES	17	YES	4	3	2 20-T	(1-OX) 8	YES	450	200 50	AE
ARBUTUS	909	YES			12		10				YES 7-T				100	
ARCADIA	HAMPSTEAD 14-F-3						1								300	
BALTIMORE	PLAZA 8860	10	14	30	800	21		YES	YES	YES	YES 12-T	160	YES	20-T	300	13-
BARTON	104-M				10		2								100	
BEL AIR	318	YES	YES	2	11		4				YES 5-T	4			100	
BELTSVILLE																
BERLIN	200						3					2			300 200	
BERWYN HEIGHTS	254				4			YES		YES		2			200 275	
BETHESDA	BRADLEY 217	YES	YES	3	14		12			YES	YES	4			90 90 95	
BETTERTON	STILLPOND 50				6											
BISHOPVILLE	BERLIN 5-F-13						1								200	
BIVALVE																
BLADENSBURG	HYATTSVILLE 8	2	YES	2	55						YES 10-T	4			100 120	
BLOOMINGTON	OPR.				4											
BOONSBORO	74						4								125	
BORING	REISTERSTOWN 136 W						1								500	
[illegible]	CAPITOL HEIGHTS														100	
[illegible] WARD HEIGHTS	[illegible]				3											
STOCKTON	14-F-15						1									
SUDLERSVILLE	MILLINGTON 29-F-11						1					1			70	
SYKESVILLE	OPR.					YES	18					2			100 200	
TAKOMA PARK	SHEPHERD 2200		YES	2	5	YES	3			YES		4			5-100 75	
TANEYTOWN	OPR.				5		4	AVAIL	YES			2			85 135	
THURMONT	OPR.						2					2				
TILGHMAN							1								320	
TOWSON	20				15		7					4			300 65	
TRAPPE	231				1		2								200	
TUXEDO-CHEVERLY	HYATTSVILLE 0464				2		1					2			100	
UNION BRIDGE	7-J				10		3								100 80	
UPPER MARLBORO	MARLBORO 123	YES	YES	2	11		1		YES			3			100	
VIENNA	DAY-911 NIGHT-676				6		2					2			200	
VIOLETVILLE	ARBUTUS 121	2				YES	3		YES		2 10-T				275	
WALKERSVILLE																
WEST ANNAPOLIS	ANNAPOLIS 4466	YES	YES	2	35	YES	ANNAPOLIS 22		YES	YES	1-7T 1-20T	2			200	
WESTERNPORT	3701				26	YES	5								2-100	
WESTMINSTER	100	YES			15		8		YES		1 5-T	2	YES	2000	2-100	
WILLIAMSPORT	3501				15		4			YES	1 15-T	2	YES		85	
WILLARDS	325						1								60 200	
WOODLAWN																
WASHINGTON, D.C.	HOBART 1616	YES		3	753	18	1972	YES	YES	YES	YES	(2-OX) 148	YES	4000		

To get the Maryland Defense Plan started, the initiative was taken by John F. [illegible] Pres Fire Service Extension, College of Engineering, University of Maryland, to whom we are [illegible] for of the state, a complete inventory of fire fighting resources was made and tabulated at [illegible]nity on a chart 3 feet by 9 feet a portion of which is reproduced above. In addition to [illegible]show officials of the state and the adjoining large cities of Baltimore and Washington. Each [illegible]any h within a 15-mile radius of the station in which the chart is posted.

DEFENSE PLAN MARYLAND

d certed Action By e Fire Companies, 56 rs, 7,991 Firemen

The organized training program of the state has put Maryland in a position to effectively operate a coordinated defense program among its fire departments. Last year 338 men completed a basic course of training and 222 an advanced course. This year there will be over 1,000 men taking these courses. The instruction is given in evening sessions of 3 hours, one session being held each week. The basic course runs for 25 weeks totaling 75 hours, and the advanced course 23 weeks totaling 23 hours. Training will be given in some 50 centers this year. High school seniors and farmers as well as members of fire companies are being admitted to training wherever there are groups that may provide potential fire fighters for areas not now protected or for protection supplementary to that of regular companies.



hey d from calling upon men r urgently needed.

ialis ce-time fire defense diffe place with a unified command covering a large area. Unified command over large areas was necessary because officers of small peace-time brigades were inexperienced at handling the emergency work hurled at them.

BS. T AM T VDER	CAP OST'R ANKS	LADDER TRUCKS	QUAD TRUCKS	FEET 2-½" HOSE	FEET 1-½" HOSE	BOAT	NUMBER OF POLICE	NO. OF POLICE CARS	TAXI-CABS	RESCUE TRUCK	FIRST AID KITS	ACTIVE FIREMEN	SCOUT TROOPS	LADIES' AUX.	OTHER EQUIPMENT
	200 60			1500	500		1		3			25			
00	150 200	2		2850	500	YES						9			
	240				500						1	35			
	300			200	400 150-1"							30			
50	200 200 150	AERIAL	2-1000	7700	1350	YES	14	1	35		2	150			
	100			800			15	2	4		1	32			
	300			900								15			
D-T	200 150 100	13-CS 17-A	3-750	150,000	4100		1396	166	999	YES	YES	1486			2-FLOOD LIGHT TRUCKS 4-CHEMICAL TRUCKS, 2 TONS OF FOAM ON EACH
	100			900	150		1					45	1		
	100			1200	600		2		2		2	45			
	300 200			2500			2	1	2			30			
	200 275			1000	250		3	3			2	30	1		
	90 90 85			4850			7	4	25		8	14	3		
				1500	300	YES	1		4		1	50			
	200			450	150							15			
	100 120			2200	500		5	5			8	80	1		
												32	1		
	125			1200	300		1					75			
	300			800	300							20			
	100			1000											6 TRUCK
					500										
					500		1					22		40	
	70			1500								38			
	100 200			2200	800		1					40		150	
	100 75			4400	500		8	2	8		2	35	3	87	
	150 125			2200	750		1					40			
				950	500		1		2			92		80	
	320				600	AVAIL						45		20	
	250 85			5000	600		20	10	YES		2	16			
	200			700	300		1					23			
	100			1150			1	1				32		10	
	100 80			1950	2000		1					45		32	HOSE REEL WITH 500' OF 1-½"
	100			800	500		2	2			2	25	1	15	LIGHT TRUCK
	200			1000	300		1					35			
	275			500							2	25		10	HOSE & LADDER TRUCK
	200		1-750	1500	800		5	2			3	45			
	2-100			1850			1		2		1	98	1		
00	2-100	YES		2900	800		3	3	2		4	60			
	85			2400	400-1"	2	2				1	35	1		
	80 200			800	200							30			
00		15-A		89,300			1422	39	4650			873		YES	1-WRECKING TRUCK 1-FUEL TRUCK

President, Maryland State Firemen's Association, and Chief James W. Just, Director, for the information here presented. Through the cooperation of the fire companies at sity of Maryland. This information, obtained from questionnaires, has been placed n t shown, the chart gives telephone numbers of the State Fire Marshal and other key Each ny has a copy of this chart posted in the fire station. Starred departments are those

(4) When "mutual assistance" actually did become a reality, it was very often found that fire fighting methods were not standardized among the various brigades working together. Standardization could be brought about only by instituting a training program to be inclusive of all brigades.

(5) Well-meaning but grossly inexperienced men held many key positions in the fire service. Time and property were lost while readjustments were made.

(6) The fire service in calling for recruits in the early stages of the war specified that such service would be "reserved occupation for men over 30." Those who were ill-informed derided would-be auxiliary firemen as "fight-shy," a bad start for a service that has now proved so valuable. In this war, the fireman is as necessary as the soldier or sailor.

These were but a few of the errors that were made at the time of the coördination of the British Fire Service, and they show that well-laid plans are not flawless. Naturally, these errors were not intentional. Fortunately, none of them was capable of completely disrupting either fire protection or fire fighting in England when the emergency finally arrived.

And while every attempt has been and is being made to exclude these errors from the Maryland Defense Plan, the attempt is also being made to ferret out every portion of the British fire program which has met with success. Examples of steps taken and well executed by the British fire service include the following:

(1) Auxiliaries were not only trained to their work and duties, but also, they were retrained. Advanced training was offered whenever and wherever possible in the time allotted. And while the training of thousands of auxiliaries was being accomplished, the training of full-time firemen was also progressing as usual.

(2) A patrolling system was instituted which insured that a fire would be checked in its infancy regardless of alarm communications.

(3) Before the war had actually begun, a vast program of construction of fire equipment had been undertaken. As a result of this foresight, pumps, for example, were being delivered at a rate of 500 a week when the war was finally declared.

FIRE PREVENTION PLAYS

National Education Association Prepares a List of Such Plays for School or Radio Audiences

FIRE departments frequently want to know where they can obtain educational plays dealing with fire prevention subjects. For the convenience of readers, an abbreviated listing of fire prevention plays is given below. These are taken from a recently published booklet by the National Education Association of the United States containing lists of such plays and scripts. It is entitled "Dramatizations in Safety Education: An Annotated Bibliography." Copies may be obtained from the N.E.A., 1201 16th Street, Washington, D. C., for 25 cents per copy.

In addition to listing the plays and scripts the booklet gives the authors, publishers, and a brief synopsis of the plot. The booklet also includes listings of plays and scripts covering all phases of safety education including first aid, proper handling of firearms, and general safety.

The listings following are given under the names and addresses of the organizations or publishers through which copies of the plays or scripts may be obtained. Dates refer to issues of periodicals in which the plays appeared. Number of characters and age groups for which the plays are suitable are given in parentheses.

American Childhood, Springfield, Mass.
April, 1939, "Friends in Need" (8, elementary).

A. S. Barnes and Co., New York, N. Y. **Programs for Special Occasions,** $1.
"Fire Prevention Week—Pageant I" (8, primary).
"Fire Prevention Week—Pageant II" (15, primary).

Benjamin H. Sanborn and Co., Boston, Mass. **Citizenship Plays,** $1.
"No Man is Above the Law" (15, junior high).

Catholic School Journal, Milwaukee, Wis.
October 1938, "Classroom Skit for Fire Prevention Week" (7, elementary).

Department of Education, Waterbury, Conn. **A Course of Study in Safety and Health, Grades I-IV,** 1936.
Play, "The Fireman" (2, primary).

Eldridge Entertainment House, Franklin, Ohio. **Little Plays about Character, Courtesy, Citizenship,** 50 cents.
"A Landlord's Troubles" (14, elementary and junior high).

E. P. Dutton and Co., New York, N. Y., Book, **Rehearsal for Safety,** $1.
Play, "Christmas Candles" (6, elementary and junior high).

Grade Teacher, Darien, Conn.
October 1938, "These Matches Spoke" (13, primary and elementary).

Instructor, Dansville, N. Y.
October 1931, "Fire Prevention" (8, primary and elementary).
October 1935, "Beware of Fire" (31, elementary).

Los Angeles City School District, Los Angeles, Calif., **Course of Study in Safety Education,** Publication No. 149.
"The Gift of Fire" (26, elementary).

Macmillan Co., New York, N. Y., **Safety First for School and Home,** $1.25.
"Fire Prevention Play" (10, elementary and junior high).

Massachusetts State Department of Education, Boston, Mass., **A Course of Study in Safety Education for the Elementary and Junior High School Grades,** Bulletin No. 3.
"The Gift of Fire" (26, elementary).

National Board of Fire Underwriters, 85 John St., New York, N. Y.
"The Defeat of Major Fire Destruction" (14, elementary).
"The Fire Next Door" (10, junior high).
"If a Match Could Speak" (13, elementary).
"The Trial of Fire" (18, elementary).

Northwestern Press, Minneapolis, Minn., **Twelve Lesson Plays for Busy Teachers,** 50 cents.
"Don's Last Practical Joke" (6, elementary).
Purpose Plays for High-School Assemblies, Vol. II, $1.
"Fire. Fire!" (6, high school).

Paine Publishing Co., Dayton, Ohio.
The Giant Stunt Book, 75 cents.
"A Fire Prevention Stunt" (6, elementary).
Plays with a Purpose, 50 cents.
"Never Play with Fire" (7, primary).
"The Story of Fire" (5 or more, primary and elementary).
The Good Health Treasure Book, 40 cents.
"The Wreck of the Reckless Matches" (8, elementary).

Pioneer Publishing Co., Fort Worth, Texas. Book, **Sparks,** 75 cents.
"The Fire Imps" (18, elementary).
"The Fire King" (8, elementary).

Rhode Island State Department of Education, Providence, R. I., **A Course of Instruction in Safety Education for the Schools of Rhode Island.**
"If Only" (15, elementary).

Safety Education, Chicago, Ill.
March 1928, "Mrs. Saveall's Attic" (8, elementary).
December 1929, "Lighting the Tree" (11, elementary).
October 1930, "The Fire Ghost" (8, elementary and junior high).
October 1931, "What Would You Do?" (4, junior high).
May 1932, "Underneath the Big Top" (8, elementary and junior high).
October 1935, "Beware the Match Boys" (12, elementary).
October 1936, "Speaking of Fires" (7, elementary and junior high).
October 1937, "The Fire Clown Visits Jimmy" (8, elementary).
October 1938, "An Ounce of Prevention (12, elementary and junior high).
December 1938, "Deck the Halls" (5, elementary).
May, 1940, "The New Clubroom" (8, junior high).

Samuel French, New York, N. Y., **Plays for the Schoolroom,** 75 cents.
"A Christmas Day Heroine" (3, elementary).

Texas Fire Insurance Department, Austin, Texas, **Fire Prevention Handbook.**
"Mother Fire's Acquittal" (24, elementary and junior high).
"Our Friend the Fire Chief" (5, elementary).

Texas Outlook, Forth Worth, Texas.
October 1936, "A Fire Dream" (11, elementary).

T. S. Denison and Co., Chicago, Ill., **Plays for Special Occasions,** 60 cents.
"Who's Guilty" (10, elementary).

Walter H. Baker Co., Boston, Mass., **Approved Boy Scout Plays,** 50 cents.
"A Scout Makes Good" (9, elementary).

Western Actuarial Bureau, Chicago, Ill.
"The League of Destruction" (8, elementary).
"The Two Inspectors" (3, adult).

Willis N. Bugbee Co., Syracuse, N. Y., **Assembly Book for Intermediate Grades,** 50 cents.
"The Fire Alarm" (8, elementary).

FOREST FIRE PLAYS

American Forestry Association, Washington, D. C.
"The Forest Fire Helpers" (12, or more, junior high).

Benjamin H. Sanborn and Co., Boston, Mass., **Citizenship Plays,** $1.
"Fighting a Forest Fire" (9, junior high).

Grade Teacher, Darien, Conn.
September 1934, "Fire Prevention" (18, elementary).

National Safety Council, Chicago, Ill., 25 cents each (elementary and junior high).
"Bruin's Inn," (20).
"The Lost Camping Place," (20).

Northwestern Press, Minneapolis, Minn.
"The Bonfire that Grew", 35 cents (elementary).

Safety Education, Chicago, Ill.
October 1927, "The Last Dryads" (11, elementary).
June 1932, "The Campfire" (5, elementary and junior high).

Courtesy George Mayer, Jr., Secretary Del-Mar-Va Volunteer Firemen's Association

A new 500 gallon pumper put in service in Easton, Maryland, the notable feature of which is a cab with seats for 7 men. GMC chassis, Northern rotary pump, 200 gallon booster tank, 700 feet 2½ inch, 200 feet 1½ inch hose. Built by U. S. Fire Apparatus Co., Inc., Wilmington, Del.

October 1934, "Jack Tends the Fire" (7, elementary and junior high).

October 1939, "Brown Eagle's Rules" (7, elementary and junior high).

U. S. Forest Service, Washington, D. C.

"All Aboard the Forestry Special" (15, elementary).

University of Minnesota, Agricultural Extension Division, St. Paul, Minn.

"Paul Bunyan and the Campers" (4, junior, senior high, adult).

RADIO PLAYS

The following fire prevention radio plays and scripts, except as noted, may be obtained from the Educational Radio Script Exchange, Federal Security Agency, Washington, D. C. Practically all are for junior, senior high and adult audiences. All except the first five listed were prepared by the Alameda City College of the Air. These scripts are identified by number and are loaned free:

No. 66. "Trial of Fire" (17).
No. 98. "Your Fire Department" (27).
No. 99. "Fire—and the Home" (21).
No. 100. "Fire—And the Public Building" (33).
No. 377. "Forest Fires" (8).
No. 378. "The Tongue of Flame" (6).
No. 379. "Matches" (8).
No. 380. "It Can Happen Here" (14).
No. 381. "Fire in the Home" (14).
No. 382. "Gasoline" (10).
No. 383. "Death Stalks Gasoline Improperly Used" (6).
No. 384. "Spontaneous Combustion" (11).
No. 385. "Carelessness, the Greatest Cause of Fires" (12).
No. 386. "Christmas Holidays" (12).
No. 387. "Fire Hazards" (8).
No. 388. "Is Your Church a Fire Trap?' (13).
No. 389. "Spring Cleaning" (12).
No. 390. "Fire Hazards on the Farm" (7).
No. 391. "The Defeat of Fire" (15).

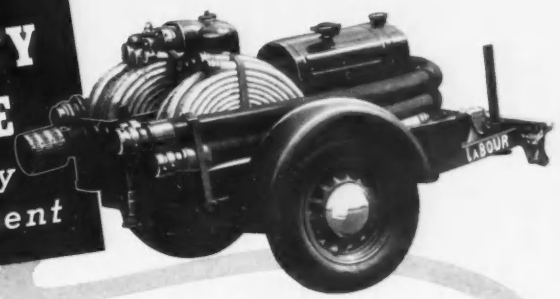
The following script should be obtained from *Safety Education*, Chicago, Ill.

October 1933, "Trouble in the Playhouse" (8, elementary).

NOT in the form of plays, but as interviews, usually for use by fire chiefs or fire marshals, the N.F.P.A. executive office has from time to time prepared a number of radio scripts. These may be useful in preparing radio material and copies for loan have been furnished the Federal Educational Radio Script Exchange. The N.F.P.A. executive office would also be glad to lend copies of any of the following scripts. Each takes 15 minutes and except the last on the list is an interview in which a fire chief or fire marshal is one of the characters.

"Fires that Come in the Spring"
"Fighting the Spring Fire"
"The Spring Clean-Up Campaign"
"Celebrating the Sane Fourth"
"Fire Prevention Week Radio Dialogue"
"Christmas Fire Hazards"
"Making Christmas Safe"
"Radio Dialogue on Home Fire Hazards" (interview with a clubwoman)

A UTILITY PIECE for any department



Large or small, metropolitan or rural, every fire department can make good use of this LaBour Fire Trailer. As an extra piece for farm fires, as a booster pump, or for pumping out basements after fires, its flexible utility answers a multitude of needs.

The LaBour centrifugal pump is inherently self-priming without any attachments or manipulation. Dirty water—even twigs and sand—will not harm the pump. It delivers 150 gallons per minute against 100 lbs. pressure, and operates anywhere from its own direct-connected engine.

Trails any passenger car, and is light enough to be moved by one man on smooth ground. Write for your free copy of Bulletin 47.

LABOUR FIRE TRAILER

THE LABOUR CO., Inc.
Elkhart, Ind., U. S. A.

A Model Records and Reporting System for Fire Departments

Size of book, 8½ x 11 inches
87 pages, 27 forms, 7 figures
Price, $2 each, postpaid

This manual suggests a detailed and well-rounded plan that should help to solve many of the problems that now confront fire chiefs in small as well as large cities and towns. It shows how a records and reporting system should operate. It includes copies of the 27 forms considered important in fire department work.

The record forms contained in this book have met with such acceptance by fire chiefs and fire departments that most of the forms have now been separately printed to meet the demands of departments wishing to purchase supplies of the blanks. Write for a price list for the various record forms. If your department has not yet obtained a copy of the Model Records and Reporting System book ask for a circular describing it so that you will have full information on the many reporting blanks available.

National Fire Protection Association
INTERNATIONAL
60 Batterymarch St., Boston, Mass.

The "Model A" Super
Which Every Volunteer Fire Department Should Know About

Both 1 Quart and 1½ Quart Sizes

Every volunteer Fire Department should know the exclusive qualities of this first-aid extinguisher which experience shows should be the first to be carried into any fire because:—

FIRST:—
It is safe to use on electrical fires. Fyr-Fyter fluid is not only a powerful fire extinguishing fluid, but a most certain insulation—safeguarding the operator against serious injury or possible death from electrical contact.

AND SECOND:—
It is effective on concealed fires in walls or other "hard to reach" locations and is effective also on fires in greases, oils and the more flammable liquids.

SALESMEN WANTED

If you are interested in adding to your income by spare time work or in building a permanent business for yourself without investment in stock, fixtures, etc., write for our new Dealer's Plan to

THE FYR-FYTER COMPANY
Dept. 20-62 DAYTON, OHIO

Membership in the N.F.P.A.

Every member receives this handsome membership certificate.

Membership with unusual advantages is available to fire companies and fire departments through the Volunteer Firemen's Section of the National Fire Protection Association. Here's the simple plan:

INDIVIDUAL membership in the National Fire Protection Association costs $10 per year. The membership plan for the Volunteer Firemen's Section is designed to give each fire company the advantages of N.F.P.A. membership. The fire company, as a member, receives at its headquarters a complete set of all regular N.F.P.A. literature, including the *Quarterly* magazine, as issued. In addition, as a special service to the Volunteer Firemen's Section, each fire company holding N.F.P.A. membership is entitled to have copies of the magazine VOLUNTEER FIREMEN sent to the home address of 10 firemen each month. If more than 10 firemen want to receive the magazine, an additional one dollar should be sent in with the membership fee for each fireman in excess of 10 enrolled.

Because of the large amount of material mailed to members, less than $10 can not be accepted from any company.

This is one of six crash trucks furnished to the Pennsylvania Turnpike Commission by National Foam System, Inc. Each has a large water tank and a pump to provide water pressure for operating the foam generator.

Are Those Christmas Trees Out Yet?

MANY fire departments regularly remind their citizens during January of the importance of getting the old dried Christmas trees and other decorations out of the house. This practice was noted by a feature writer in the New York Times Magazine in an article "About Trees." He says in part:

"The city of Boulder, Col., with its Twelfth Night festival uses discarded Christmas trees to bring the Christmas season to an official end. Right after the New Year the city decorations are taken down and piled in the center of the baseball park, to which city and county trucks add trees collected from city homes. Then on Twelfth Night, the stacks of trees are burned in a ceremony that includes band and vocal music. Boulder officials say that the fire prevention value of the festivals—keeping dried wreaths and trees out of attics and basements—is considerable.

"Discarded Christmas trees have other climaxes more fitting—from a sentimental point of view at least—than a rubbish heap. Many owners of fireplaces burn them, a cautious bit by bit, in the open fire. Trees also supply fuel for the needy. In many cities Boy Scouts collect them, cut them into stove lengths and distribute them to the poor."

Looks like he has something there. But the main idea is to get the trees and decorations out. Have they done it in your town?

Surveys All Buildings in Middletown, Ohio

MEMBERS of the Fire Department of the City of Middletown, Ohio, under the direction of Chief E. F. Reed, have recently completed a survey of all buildings. The survey took approximately two years to make and the department now has a complete record of all structures in the city. This record can be kept up to date by checking with the building permits issued by the City Building Inspector.

The survey covers a total of 13,488 buildings of which 14 were four stories or more in height. Over half or 8706 were only one story high. The survey also covers the type of construction and frame buildings by far predominate in Middletown with 11,055 buildings of this type of construction. The survey also gives the occupancy of all of the buildings. One of the most important features of the survey from the fire department point of view is the detailed information obtained on the type of roofing with which the buildings in the city are covered. Chief Reed points out that out of a total of 13,488 roofs in the city, 10,679 are of fire-retardant types, but 2,257 wooden shingle roofs still remain in the city.

Christmas Greeting Verse Proves Popular

"--AND that if we come to see you, We won't have to bring our truck." That was the way the Christmas verse ended up which we presented in the December issue of VOLUNTEER FIREMEN. It was developed and used by Chief H. Walton and his fire department of New Toronto, Ontario, in a card which combined cordial greetings with some sound fire prevention advice about the special fire hazards encountered in most homes at Christmas.

There has been widespread interest in these verses and numerous fire departments have written to the executive office and to Chief Walton asking permission to reproduce them for use in their own communities. Chief Walton has most graciously given this permission.

We're sorry we haven't made a list of all those who have asked about the verses, but as we write this, we have before us two records of their use. One of these is a copy of the Christmas issue of the Washington (Pennsylvania) *Observer* in which there is the greeting to its citizens of the Volunteer Fire Company of Waynesburg, and the other is the Christmas card of Chief T. P. Treadwell and his men of the fire department of Fort Collins, Colorado.

The Campaign for State Laws on Fireworks

PRACTICAL elimination of serious accidents due to the use of fireworks on 4th of July and other times during the year has been accomplished in the nine states which have reasonably adequate legislation on the subject based on the N.F.P.A. Model Fireworks law. A copy of the law will be mailed to any reader on request. This regulation does not prohibit fireworks entirely, but authorizes properly supervised local public displays as a substitute for promiscuous use of fireworks. It has reduced fireworks acci-

dents to a minimum and saved many, particularly small children, from horrible death or disfigurement.

You can stop the average careless thinker about the fireworks problem with the cold fact that more people have been killed since 1900 just in celebrating the 4th of July, than were killed in the entire Revolutionary War.

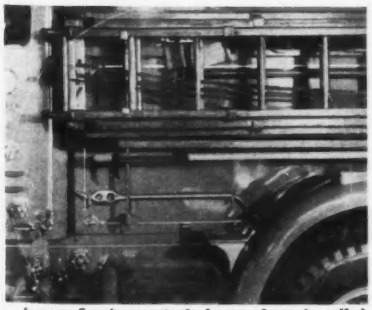
In addition to Iowa, Michigan and New Jersey, the following states have laws practically identical with the Model Law: Delaware, Indiana, Pennsylvania, New York, Utah and West Virginia. Indications are that the bill will be introduced in the following additional states this year: Arizona, Florida, Maine, Massachusetts, Rhode Island, North Carolina, South Carolina, Ohio, Illinois, Missouri, Kansas, Maryland, Nebraska, North Dakota, Minnesota, Oklahoma and Tennessee.

In certain states firemen's organizations are sponsoring the bill. In others the state fire marshal's office is doing it. Because of the many persons who are blinded by fireworks accidents, the national and local societies for the prevention of blindness are lending their support along with women's organizations and civic associations.

As a fire department or fire company or as individuals, firemen can best lend their support by notifying their representatives in the state legislature of their interest in these measures.

Nebraska Regional Fire Schools

REGIONAL firemen's training schools on the following tentative dates have been announced to be held: in Norfolk, February 17; Valentine, February 19; Alliance, February 21; North Platte, February 24; Holdrege, February 25; and Beatrice, February 27. Russell D. Salak, President of the Nebraska State Volunteer Firemen's Association, is urging fire departments near to these points to attend and if possible to bring some of the city officials for the educational value the schools will be to these men.



A new five-in-one tool shown above is called the "Huxbar," an opener for inside or outside doors, a plaster hook, roof cutter and window opener, in addition to a variety of other uses. A descriptive folder can be obtained from Walter C. Huxel and Company, 230 East Front Street, Cincinnati, Ohio.

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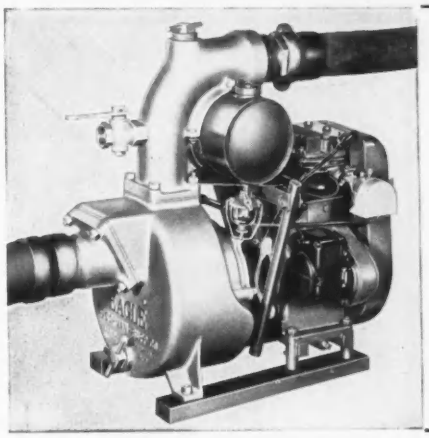

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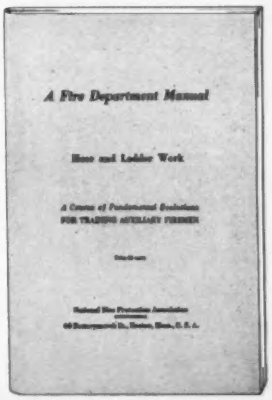

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PYRENE PRIZE LETTER CONTEST

"I HOPE to take part in future contests," says Theodore Lamplugh, of Linwood, Pa., who won a prize last month. Firemen who have won a prize are enthusiastic. They can use the cash awards.

You have probably been present at numerous fires where approved fire extinguishers have been successfully used. Every month the above cash prizes are paid to those whose letters contain the best stories.

It's the story we want, and no one need be bashful because he may doubt his ability to write the story effectively. Get the facts down on paper. We will attend to any rewriting necessary to get the story into the space available in these columns and to provide the story with a suitable heading.

This contest is sponsored cooperatively by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN to bring the lessons which may be learned from actual fires of the value of fire extinguishers as a means of saving life and property. Your story can help in this important service.

The stories reported in this contest this month and every month show over and over again the value of having an extinguisher handy.

FIRST PRIZE—$10.00

WALTER R. EAKINS
Fire School Instructor
Windber Fire Company, No. 1
Windber, Pa.

Serious Hospital Fire Averted

Christmas morning, about 6 o'clock, an alarm was received for a fire in the local hospital. I lived near so arrived there before the fire company. A large Christmas tree in the children's ward had caught fire from cotton underneath it becoming ignited by a spark from an electric train system.

Prompt work on the part of nurses using 2½-gallon soda-acid extinguishers available resulted in the fire being extinguished before the arrival of the company. All children were also removed to safety.

Within a few hours a new tree was set up, all traces of the fire removed, and everybody had a Merry Christmas —thanks to the extinguishers.

SECOND PRIZE—$3.00

FRANK HART
Philip Volunteer Fire Company
Philip, S. D.

A Gasoline Stove Fire

One day last summer my mother asked me to start the gasoline stove which was on our back porch. I started the generator and went on an errand for her. While I was gone, she turned on the gas and turned off the generator. She apparently thought the stove was hot enough to light itself, and left it to do some work in another part of the house.

Soon cold gasoline was running down on the pan and floor and flames were spreading up the walls of the porch. On discovering the fire, she ran and got a 1-quart carbon tetrachloride extinguisher. With this, she extinguished the flames on the wall and could reach the shut-off on the stove and in no time at all she had the fire out. The principal damage was three broken window panes.

THIRD PRIZE—$2.00

W. R. WILLIS, *Drillmaster*
Kilgore Fire Department
Kilgore, Texas

Good for a Laboratory Fire

When we arrived in response to an alarm from the Texas Railroad Commission offices here, we found an extinguisher had been used to put the fire out.

The man in charge of the laboratory had been testing some gasoline which he had placed in a stoppered test tube over a Bunsen burner. He had apparently stepped away from it for a few minutes and there had been an explosion that blew the stopper out of the test tube and sprayed the gasoline about. The fire was put out with a few strokes from a carbon tetrachloride extinguisher.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.

2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.

3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.

4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.

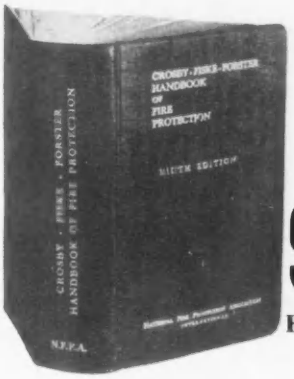
5. Only one letter may be submitted each month.

6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.

7. Letters received after the 8th of the month will be judged in following month's competition.

8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.

9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.



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Now the new Ninth Edition of the Handbook of Fire Protection is ready! It is by far the most comprehensive yet issued. Practically every chapter shows some revision, in many of them the revisions being substantial in character. At least thirty percent of the text has been completely re-written.

There are dozens of new tables, charts, diagrams and illustrations. One such is the completely revamped table of Fire Hazard Properties of Certain Flammable Liquids, Gases and Solids occupying 41 pages of the new edition. In keeping with the purpose of a reference book, all information is presented clearly, concisely and as far as possible in non-technical language.

Naturally, the task of preparing this new Ninth Edition has been more than a one-man job. Those responsible for this new and greater up-to-date Handbook of Fire Protection have been the more than 100 men who are recognized authorities in the various branches of the fire protection engineering profession. Their knowledge and talents combined is presented to you in the new 1300-page Ninth Edition of the Crosby-Fiske-Forster Handbook.

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42. Sprinkler Maintenance Problems.
43. Sprinkler Leakage.
44. Outside Open Sprinklers.
45. Special Extinguishing Systems.
46. Signaling Systems and Thermostats.
47. Self Inspection.
48. Private Fire Organization.
49. Salvaging Operations.
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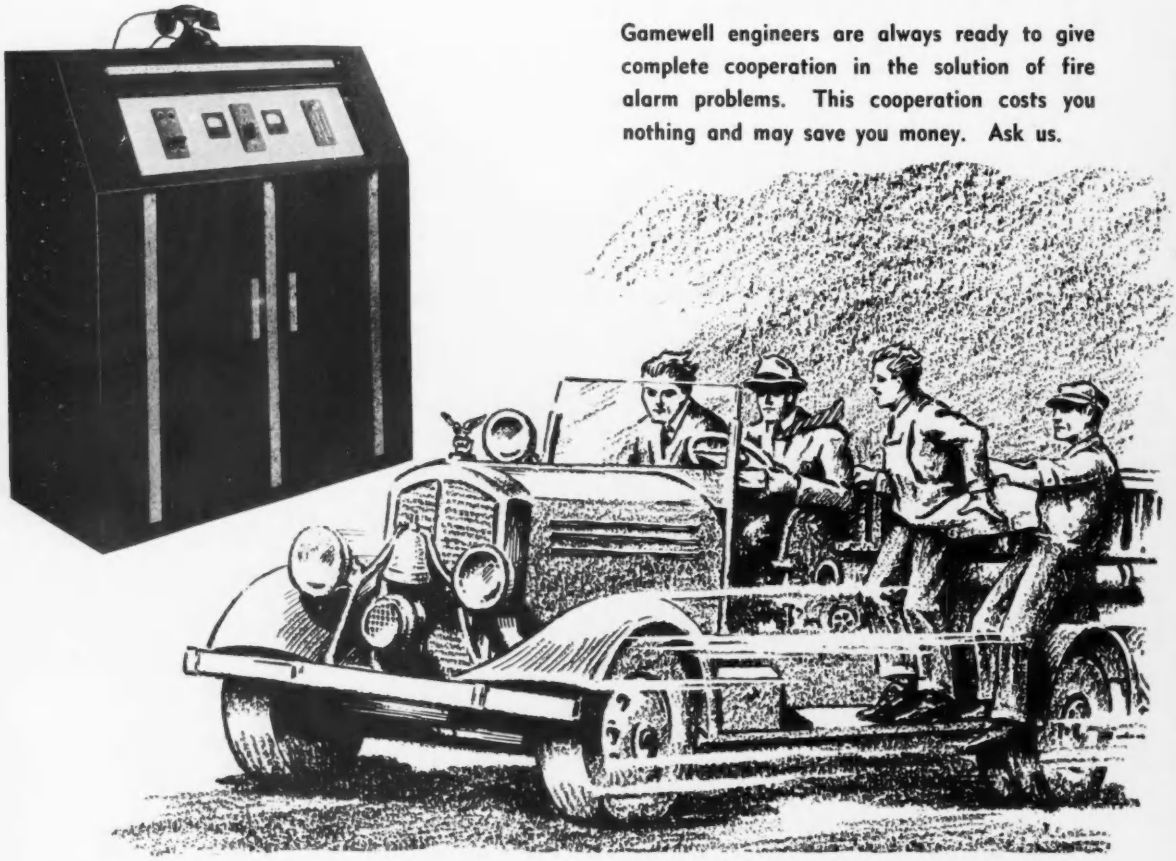

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